REMARKS

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated June 8, 2006. By the present Amendment, the claims have been amended to clarify the invention as will be discussed below.

Reconsideration and removal of the rejection of claims 1-6, 9, 11 and 13 over Seiichi (JP 2002-197899) and Matsumoto (USP 6,339,388) and the rejection of claims 8, 10 and 12 solely over Seiichi, as well as the rejection of claims 7 and 14 over the combination of Seiichi and Sakaguchi (USP 6,766,266) is respectfully requested. By the present Amendment, the claims have been amended to more clearly define the significance of a shift register or a plurality of shift registers provided between a digital functional unit and an analog functional unit. This is shown, in one example, in the embodiments of Figs. 2 and 3. In particular, in accordance with these features of the present invention, at least one shift register is provided in the place of a buffer between a digital functional unit and an analog functional unit. The shift register serves the function of dividing the analog functional unit and the digital functional unit from one another. Based upon this structure, an output of an operational result of the digital functional unit can be provided from the shift register, which serves as a last stage of the digital functional unit, before the output is provided to a terminal.

Referring to independent claim 1, as an example, this claim has been amended to change the language concerning a "first terminal for functionally dividing" to specifically define "a shift register coupled between said digital functional

unit and said analog functional unit." Similarly, each of the other independent claims has been amended to specifically include the recitation of the shift register coupled between the digital functional unit and the analog functional unit (including the newly submitted independent claim 16).

With regard to this, it is noted that none of the cited references teaches or suggests a shift register coupled between a digital functional unit and an analog functional unit, of the use of a shift register to functionally divide a digital functional unit from an analog functional unit, particularly within the overall combination of elements defined by the various claims. Further, none of the references suggests the use of such a shift register, located in the claimed manner, to achieve providing an output of a test result of a digital functional unit to a terminal, without passing through the analog function unit (as defined, for example, in independent claim 1 and various others of the independent claims). Accordingly, it is respectfully submitted that each of the independent claims now clearly defines both structurally and operationally over the cited prior art to Seiichi, Matsumoto and Sakaguchi.

It is noted that the primary reference to Seiichi teaches that an operational result of a digital functional unit is outputted from an input/output buffer 16 through a buffer 15. Although a register circuit 21 is provided, this is not utilized in the claimed location or for the claimed operation of the shift register defined in each of the present independent claims. Therefore, Seiichi, like Matsumoto and Sakaguchi, completely fails to teach or suggest the claimed structural arrangement of the shift register, as defined by the present claims, or the advantageous operation (for example, for providing the output from the digital

functional unit to a terminal without passing through the analog functional unit) which is achieved through the use of the claimed shift register. Therefore, reconsideration and allowance of the amended claims 1-14 and the newly presented claims 15 and 16 is respectfully requested.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No. 500.43218X00), and please credit any excess fees to such deposit account.

Respectfully submitted,
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